

**REMARKS**

Claims 1-31 are pending in this application, claims 7-24 and 27-31 having been withdrawn from consideration. By this Amendment, claims 2, 15 and 22 are amended. Support for the amendments to claims 2 and 15 can be found in the specification as originally filed, for example at page 4, lines 21-29, and in claim 2 as originally filed. Support for the amendment to claim 22 can be found in claims 21 and 22 as originally filed. Thus, no new matter is added by these amendments.

Also by this Amendment, the specification is amended. Specifically, the paragraph beginning on page 4, line 19 is amended to incorporate the subject matter of original claim 2 and the paragraph beginning on page 4, line 30 is amended to incorporate the subject matter set forth in original claim 5. Thus, no new matter is added by these amendments.

**I. Rejections Under 35 U.S.C. §112**

The Office Action rejects claims 2 and 25 under 35 U.S.C. §112, first paragraph, as allegedly lacking enablement in the specification. The Office Action further rejects claim 2 under 35 U.S.C. §112, second paragraph, as allegedly lacking antecedent basis. Applicants respectfully traverse these rejections.

With respect to claim 25, the Office Action alleges that the specification does not provide support for the proportion by weight of the plasticizing medium of the composition to be between 120 and 145% by weight of resin. Applicants respectfully submit that this subject matter was set forth in the original application, specifically in claim 5 as originally filed. Applicants further submit that the specification has been amended to explicitly set forth the subject matter recited in original claim 5. Thus, Applicants respectfully submit that claim 25 is enabled by the specification.

With respect to claim 2, the Office Action alleges that the specification does not support a halogen-free, fire-retarded plastic composition in which the weight proportion of

the plasticizing medium comprising a phthalate is at most equal to 200% with respect to the weight of acrylic resin and that there is insufficient antecedent basis for the weight proportion of the plasticizing medium comprising a phthalate.

However, Applicants respectfully submit that this subject matter was set forth in the original application, specifically in claim 2 as originally filed. Applicants further submit that the specification has been amended to explicitly set forth the subject matter recited in original claim 2. Further, claim 2 has been amended to set forth that the weight proportion of the plasticizing medium comprising a phthalate or a phosphate is at most equal to 200% with respect to the weight of acrylic resin and/or the weight proportion of the intumescent agent is at most equal to 200% with respect to the weight of acrylic resin. Thus, both plasticizing medium comprising a phthalate and plasticizing medium comprising a phosphate were disclosed in the original application as having a maximum weight proportion of 200% relative to the weight of the resin. See Specification, page 4, lines 19-26; original claim 2. Applicants respectfully submit that claim 2 is supported by the specification and by the disclosures of the application as originally filed. Applicants further submit that the specification provides proper antecedent basis for all of the limitations of claim 2.

Accordingly, reconsideration and withdrawal of the rejections of claims 2 and 25 under 35 U.S.C. §112 is respectfully requested.

## **II. Rejections Under 35 U.S.C. §103(a)**

### **A. Ferziger, Dias and Hudecek**

The Office Action rejects claims 1-6, 25 and 26 under 35 U.S.C. §103(a) over U.S. Patent 4,801,493 to Ferziger et al. in view of U.S. Patent 4,256,786 to Dias et al and U.S. Patent 3,971,744 to Hudecek et al. Applicants respectfully traverse this rejection.

Independent claim 1 sets forth, in pertinent part, a "halogen-free fire-retarded plastic composition suitable for coating a substrate, comprising an acrylic resin and an intumescent

agent, wherein: - said composition is in the plastisol state and comprises a plasticizing medium in which the acrylic resin and the intumescent agent are dispersed; - said composition exhibits, at low shear rates, Newtonian rheological behavior with a viscosity of less than 6000 mPa.s; and - said composition exhibits, at high shear rates, pseudoplastic rheological behavior." Claims 2-6, 25 and 26 depend, directly or indirectly, from claim 1.

Ferziger discloses chemically coated fabrics including a fiberglass fabric base to which at least one layer of a polymeric coating has been applied. *See* Ferziger, col. 3, lines 4-7. The fiberglass fabric base is "inherently flame retardant." *See* Ferziger, col. 3, lines 7-8. The Ferziger polymeric coating includes a polymeric carrier, which may be an acrylic resin and contains at least one flame retardant ingredients, and may also contain a plasticizer, such as an organic phosphate, and fillers. *See* Ferziger, col. 4, lines 1-37.

However, as admitted by the Office Action, Ferziger does not disclose or suggest the inclusion of an intumescent agent, as set forth in claim 1. The Office Action also admits that Ferziger does not disclose or suggest the use of a phthalate as a plasticizer.

Applicants respectfully submit that Ferziger also does not disclose or suggest that its coating composition has Newtonian rheological properties at low shear rates and pseudoplastic rheological properties at high shear rates, as set forth in claim 1.

Thus, Ferziger alone would not have rendered claims 1-6, 25 and 26 obvious. *Dais* does not remedy the shortcomings of Ferziger.

Dias discloses a composition to impart chemical and fire resistance to polyurethane foams and textiles. *See* Dias, col. 1, lines 11-16. The Dias compositions are aqueous slurries of active carbon, chemical fire retardants and resin binders, such as acrylic resins. *See* Dias, col. 1, lines 57-61. Dias discloses that its coating composition is applied by immersion in an aqueous dispersion. *See* Dias, col. 4, lines 33-36.

Applicants respectfully submit that Dias, like Ferziger, does not disclose or suggest the inclusion of an intumescent agent, as set forth in claim 1. In addition, Dias does not disclose or suggest that its coating composition is in a plastisol state or has Newtonian rheological properties at low shear rates and pseudoplastic rheological properties at high shear rates, as set forth in claim 1.

Thus, Ferziger and Dias, alone or in combination, would not have rendered claims 1-6, 25 and 26 obvious. Hudecek does not remedy the shortcomings of Ferziger and Dias.

Hudecek discloses a method for forming emulsions, concentrated dispersions and pastes based on plasticizers and hydrophilic fillers. *See* Hudecek, col. 1, lines 5-7.

However, Applicants respectfully submit that Hudecek, like Ferziger and Dias, does not disclose or suggest the inclusion of an intumescent agent, as set forth in claim 1. In addition, Hudecek does not disclose or suggest that its coating composition is in a plastisol state or has Newtonian rheological properties at low shear rates and pseudoplastic rheological properties at high shear rates, as set forth in claim 1.

Accordingly, Applicants respectfully submit that claims 1-6, 25 and 26 are patentable over Ferziger, Dias and Hudecek, individually and in combination. Reconsideration and withdrawal of the rejection are respectfully requested.

**B. Bridge and Hudecek**

The Office Action rejects claims 1-6, 25 and 26 under 35 U.S.C. §103(a) over British Patent Application Publication 2,079,801 to Bridge et al. in view of Hudecek. Applicants respectfully traverse this rejection.

Claim 1 is as set forth above.

Bridge teaches glass fabrics treated with a non-intumescent, char forming composition. *See* Bridge, Abstract. The Office Action admits that Bridge does not disclose or suggest the use of a phthalate as a plasticizer.

Bridge does not, as is evident from its Abstract, disclose or suggest the inclusion of an intumescent agent, as set forth in claim 1. *See* Bridge, Abstract. In addition, Bridge does not disclose or suggest that its coating composition is in a plastisol state or has Newtonian rheological properties at low shear rates and pseudoplastic rheological properties at high shear rates, as set forth in claim 1.

Thus, Bridge alone would not have rendered claims 1-6, 25 and 26 obvious. Hudecek does not remedy the shortcomings of Bridge.

As discussed above, Hudecek does not disclose or suggest the inclusion of an intumescent agent, as set forth in claim 1. In addition, Hudecek does not disclose or suggest that its coating composition is in a plastisol state or has Newtonian rheological properties at low shear rates and pseudoplastic rheological properties at high shear rates, as set forth in claim 1.

Accordingly, Applicants respectfully submit that claims 1-6, 25 and 26 are patentable over Bridge and Hudecek, individually and in combination. Reconsideration and withdrawal of the rejection are respectfully requested.

### **III. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-31 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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